

PTO/SB/08A (08-03)

Substitute for form 1449A/P

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 3

**Complete If Known**

Application Number	10/661,373
Filing Date	September 12, 2003
First Named Inventor	Kyosuke Achiwa
Art Unit	2155
Examiner Name	Unassigned
Attorney Docket Number	16869P-094500US

**U.S. PATENT DOCUMENTS+**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
H H	1	US-6,647,474	11-11-2003	Yanai et al.	
	2	US-6,625,705	09-23-2003	Yanai et al.	
	3	US-2003/167419	09-04-2003	Yanai et al.	
	4	US-6,587,919	07-01-2003	Yanai et al.	
	5	US-6,539,482	03-25-2003	Mikkelsen et al.	
	6	US-6,502,205	12-31-2002	Yanai et al.	
	7	US-6,418,509	07-09-2002	Yanai et al.	
	8	US-6,247,046	06-12-2001	Yanai et al.	
	9	US-6,230,239	05-08-2001	Sakaki et al.	
	10	US-6,185,653	02-08-2001	Yanai et al.	
	11	US-6,173,377	01-09-2001	Yanai et al.	
	12	US-6,003,114	12-14-1999	Bachmat.	
	13	US-5,998,045	11-30-1999	Lee et al.	
	14	US-5,978,890	11-02-1999	Ozawa et al.	
	15	US-5,960,216	09-29-1999	Vishitzky et al.	
	16	US-5,940,865	08-17-1999	Ohzora et al.	
	17	US-5,909,692	06-01-1999	Yanai et al.	
	18	US-5,901,327	05-04-1999	Ofek.	
	19	US-5,898,548	04-20-1999	Ofek.	
	20	US-5,835,954	11-10-1998	Duyanovich et al.	
	21	US-5,819,020	10-08-1998	Beeler	
	22	US-5,742,792	04-21-1998	Yanai et al.	
	23	US-5,742,792	04-21-1998	Yanai et al.	
	24	US-5,740,465	04-14-1998	Matsunami et al.	
	25	US-5,692,155	11-25-1997	Iskiyan et al.	
	26	US-5,680,640	10-21-1997	Ofek et al.	
	27	US-5,664,144	09-02-1997	Yanai et al.	
	28	US-5,644,787	07-01-1997	Nakamura et al.	
	29	US-5,625,840	04-29-1997	Numata et al.	
	30	US-5,613,155	03-18-1997	Baldiga et al.	
	31	US-5,588,012	12-24-1996	Oizumi.	
	32	US-5,572,699	11-05-1996	Kamo et al.	
	33	US-5,544,347	08-06-1996	Yanai et al.	
	34	US-5,544,347	08-06-1996	Yanai et al.	
	35	US-5,379,398	01-03-1995	Cohn et al.	
	36	US-5,247,665	09-21-1993	Matsuda et al.	
	37	US-5,235,690	08-10-1993	Beardsley et al.	
	38	US-5,206,939	04-27-1993	Yanai et al.	
	39	US-5,155,845	10-13-1992	Beal et al.	
	40	US-4,451,884	05-29-1984	Heath et al.	
	41	US-3,990,055	11-02-1976	Henderson et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns,	T <sup>3</sup>
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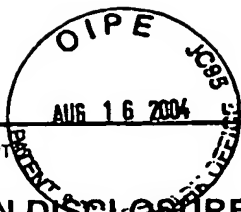
Examiner  
Signature

Kevin L. Ellis

Date  
Considered

10/12/05

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08A (08-03)

Substitute for form 1449A/P1

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 2 of 3

**Complete if Known**

Application Number	10/661,373
Filing Date	September 12, 2003
First Named Inventor	Kyosuke Achiwa
Art Unit	2155
Examiner Name	Unassigned
Attorney Docket Number	16869P-094500US

		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
UK	42	JP	2000-305856		11-02-2000	Hitachi Ltd.	<input checked="" type="checkbox"/>
	43	JP	11-338647		12-10-1999	Hitachi Ltd.	<input checked="" type="checkbox"/>
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	47	JP	08-250795		09-09-1994	Hitachi Ltd	<input checked="" type="checkbox"/>
	48	JP	08-087811		03-11-1994	Fuji Xerox Co. Ltd	<input checked="" type="checkbox"/>
	49	JP	03-204023		09-05-1991	Fujitsu Ltd.	abstract only
	50	JP	02-059934		02-28-1990	NEC Corp	abstract only
	51	JP	64-033770		02-03-1989	NEC Corp	abstract only
	52	JP	58-219656		12-12-1983	Hitachi Ltd.	abstract only
UK	53	JP	58-151660		09-08-1983	Hitachi Ltd.	abstract only

Examiner  
Signature

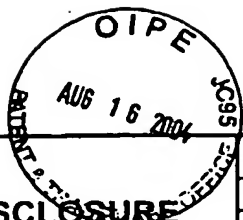
Kevin L. Ellis

Date  
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PTO/SB/08B (08-03)

Substitute for form 1448B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 3 of 3

**Complete If Known**

Application Number	10/661,373
Filing Date	September 12, 2003
First Named Inventor	Kyosuke Achiwa
Art Unit	2155
Examiner Name	Unassigned
Attorney Docket Number	16869P-094500US

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
NR	54	ROSENBLUM "The Design and Implementation of a Log-Structured File System," ACM Transactions on Computer Systems 10:26-52 (1992).	
NA	55	"Symmetrix Data Migration Services (SDMS)" EMC <sup>2</sup> Symmetrix ICDA Family Product Information (2000).	

Examiner Signature	Kevin L. E/11/12	Date Considered	10/12/05
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Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/661,373
		Filing Date	September 12, 2003
		First Named Inventor	Kyosuke Achiwa
		Art Unit	2155
		Examiner Name	Unassigned
Sheet 1	of 1	Attorney Docket Number	16869P-094500US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
115	1	PCT	WO 01/04754	A2	01-18-2001	Hitachi Data Systems		<input type="checkbox"/>
115	2	PCT	WO 98/20419	A1	05-14-1998	Vinca Inc.		<input type="checkbox"/>

Examiner Signature	Nevin L Ellis	Date Considered	10/12/05
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PTO/SB/08A (08-03)

Substitute for form 1449A/PTO			<b>Complete if Known</b>		
			Application Number	10/661,373	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			Filing Date	September 12, 2003	
			First Named Inventor	Kyosuke Achiwa	
			Art Unit	2188	
			Examiner Name	Kevin L. Ellis	
			Attorney Docket Number	16869S-094500US	
Sheet	1	of	2		

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Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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UK	1	US-6,804,755	10-12-2004	Selkirk et al.	
	2	US-2004/0167942 A1	08-26-2004	Oshinsky et al.	
	3	US-6,779,094	08-17-2004	Selkirk et al.	
	4	US-6,760,723 B1	07-06-2004	Oshinsky et al.	
	5	US-6,847,473	11-11-2003	Golds et al.	
	6	US-6,594,744	07-15-2003	Humlicek et al.	
	7	US-2002/0116404 A1	08-22-2002	Cha et al.	
	8	US-6,378,054 B1	04-23-2002	Karasudani et al.	
	9	US-2002/0015336 A1	02-07-2002	Watkins et al.	
	10	US-5,845,328	12-01-1998	Maya et al.	
UK	11	US-5,522,037	05-28-1996	Kitagawa et al.	

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Examiner Signature	Kevin L. Ellis	Date Considered	10/12/05
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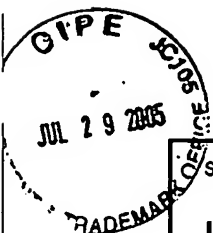
Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
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				Filing Date	September 12, 2003
				First Named Inventor	Kyosuke Achiwa
				Art Unit	2188
				Examiner Name	Kevin L. Ellis
Sheet	2	of	2	Attorney Docket Number	16869S-094500US

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UH	12	BURNS et al. "A Linear Time, Constant Space Differencing Algorithm," IEEE proceedings of the 1997 Performance, Computing, and Communications Conference pp. 429-436 (February 1997).	
UH	13	SVOBODOVA "File Servers For Network-Based Distributed Systems," ACM Computing Surveys 16:353 - 398 (December 1984).	

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	3	US-6,578,120	08-10-2003	Crockett et al.	
	4	US-6,487,645	11-26-2002	Clark et al.	
UK	5	US-6,286,085	09-04-2001	Jouenne et al.	

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